REMARKS

Objections to the Claims:

Claims 5 and 12 have been objected to because the comma after the word "and" in step (b) of both claims is inappropriate. Applicants have amended the claims to delete the commas.

Rejection of the claims under 35 USC 112:

Claims 5, 7, 8, 12-14, 16, and 17 have been rejected under 35 U.S.C. 112, second paragraph, as being indefinite. The Action states that there is insufficient standard in the specification or the claims for ascertaining the scope of the terms "styrene-maleic anhydride-based random copolymer" of claim 5 and "vinyl ether-maleic anhydride-based alternating copolymer" of claim 12. The action states that it is unclear to what degree one could vary the structure of the copolymers and meet the limitations of the claimed invention. Applicants have amended the specification to obviate the rejection. Specifically Applicants have amended claims 5 and 12 to recite a "styrene-maleic anhydride random copolymer" and a "vinyl ether-maleic anhydride alternating copolymer" respectively.

Rejection of the claims under 35 USC 102:

Claims 12, 13, 16, and 17 have been rejected under 35 U.S.C. 102(e) as being anticipated by Rozema et al. (US Patent Application Publication No. 20020052335). Applicants have amended the claims to obviate the rejection. Specifically, claim 12 has been amended to recite butyl vinyl ether maleic anhydride polymer. 20020052335 teaches only a methylvinylether maleic anhydride. 20020052335 further teaches only reacting amine and imidazole containing compounds with methylvinylether maleic anhydride polymers and not hydrophobic groups as is recited in Applicants' claim 12. Reaction of a histamine with a methylvinylether maleic anhydride polymer will not, as the Action states, form a hydrophobic ester (see structure following paragraph [0035] of 20020052335). Hydrophobic is not equivalent to uncharged. While pH may affect the charge of a histamine, the histamine will remain polar, rather than hydrophobic.

Claims 12, 13, 16, and 17 have been rejected under 35 U.S.C. 102(e) as being anticipated by Trubetskoy et al. (US Patent No. 6,740,336) as evidenced by Rozema et al. (US Patent Application Publication No. 2002/0052335). It is the Applicants' opinion that the

amendments and arguments made in response to the 102 rejection over 20020052335 are sufficient to overcome the rejection over 6,740,336.

Claims 12, 13, and 16 have been rejected under 35 U.S.C. 102(b) as being anticipated by Tomlinson et al. (US Patent 6,211,250) as evidenced by Yu et al. (Journal of Investigative Dermatology 1999). Applicants have amended claim 12 to recite "forming a butyl vinyl ether-maleic anhydride alternating copolymer". Support for the amendment can be found in the specification on page 6 lines 7-12. Tomlinson teaches only polymers made with methyl vinyl ether-based copolymer.

Claims 5, 7, 8, 12, 13, 16, and 17 have been rejected under 35 U.S.C. 102(e) as being anticipated by Adams et al. (US Patent Publication 20050153926). Applicants respectfully disagree. Adams does not teach covalently linking hydrophobic groups to anhydride monomers in a styrene-maleic anhydride random copolymer or a vinyl ether-maleic anhydride alternating copolymer. Rather, Adams teaches that carboxylic acid groups can be used to attach nucleic acids (paragraph [0081] and [0090-0091]) or crosslinking agents (paragraph [0084]). Thus, Adams does not teach the formation of membrane active polymer capable of lysing mammalian cell membranes at pH 6.5.

Rejection of the claims under 35 USC 103:

Claims 5 and 7, 8, 12-14, 16, and 17 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Tonge et al (US Patent 6,436,905) in view of Maeda et al (US Patent 4,732,933). The action states that the Applicants have not shown that the presence of the lipid of Tonge et al. materially changes the characteristics of Applicants invention. The description of Tonge et al., clear demonstrates that the primary component of their invention is a lipid-containing composition. The stated purpose of the polymer of Tonge et al. is to solubilize the lipid in aqueous medium. Lipids are known in the art to be insoluble in water. Thus, the polymer and lipid of Tonge et al. intimately interact with each other and therefore have profound effects on each other. Interaction of Applicants' polymer, and specifically hydrophobic groups of the polymer, with the lipids of Tonge et al. would be expected to considerably alter the ability of the polymer to interact with cell membranes.

Claim 14 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Adams et al. in view of Tonge et al. Claim 14 has been canceled.

The Examiner's objections and rejections are now believed to be overcome by this response to the Office Action. In view of Applicants' amendment and arguments, it is submitted that claims 5, 7, 8, 12, and 16-17 should be allowable.

Respectfully submitted,

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I hereby certify that this correspondence is being transmitted to the USPTO on this date: May 10, 2007 .

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